



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,391	07/29/2003	Bruce F. Field	A53.12-0006	6509

27367 7590 08/23/2005

WESTMAN CHAMPLIN & KELLY, P.A.
SUITE 1600 - INTERNATIONAL CENTRE
900 SECOND AVENUE SOUTH
MINNEAPOLIS, MN 55402-3319

EXAMINER

AVERY, BRIDGET D

ART UNIT	PAPER NUMBER
----------	--------------

3618

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/629,391

Applicant(s)

FIELD, BRUCE F.

Examiner

Bridget Avery

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06/06/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 2,3,15,16,31 and 32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-14,17-30 and 33-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

al

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 4-14, 17-30 and 33-35 are rejected under 35 U.S.C. 102(b) as being anticipated by International Publication No. WO/93/23263 (published November 25, 1993). The United States District Court for the District of Minnesota overturned the decision granting a petition under 37 CFR 1.137(b) reviving application No. 07/948,288 for purposes of copendency with application No. 08/705,001. See Field Hybrids, LLC v. Toyota Motor Corp., 2005 U.S. Dist. LEXIS 1159 at *22 (D.C. Minn., Jan. 27, 2005). In the absence of copendency between application No. 08/705,001 and application No. 07/948,288, the above application is not entitled to benefit under 35 U.S.C. 120 of a filing date earlier than August 29, 1996 (the filing date of application No. 08/705,001). Since International Publication No. WO/93/23263 was published more than one year before the earliest filing date to which the above application is entitled, International Publication No. WO/93/23263 qualifies as prior art under 35 U.S.C. 102(b) with respect to the claims of the above application. Since International Publication No. WO/93/23263 essentially contains the same disclosure as the above application and qualifies as prior art under 35 U.S.C. 102(b) with respect to the claims of the above application, Claims X through XX are not patentable under 35 U.S.C. 102(b) as being

Art Unit: 3618

anticipated by International Publication No. WO/93/23263. See Field Hybrids, 2005 U.S. Dist. LEXIS 1159 at *24-25.

2. Claims 1, 4-14, 17-30 and 33-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawakatsu (US Patent 4,407,132).

Kawakatsu teaches a hybrid vehicle assembly including: an electric motor/generator (3), which is operable as a motor and as an electrical energy generator; an engine (1); a connection between the electric motor/generator (3) and the engine (1); a first electrical storage mechanism (49) connected to the electric motor/generator (3) for selectively powering the electric motor/generator (3); an energy conversion device (23) continuously connected to the engine (1); a second electrical storage mechanism (see column 5, lines 3-4); and a voltage reducer (53) coupled to the first electrical storage mechanism (49), the energy conversion device (23) and the second electrical storage mechanism so as to provide charge from the first electrical storage mechanism (49), the energy conversion device (23) and the electrical energy generator to the second electrical storage mechanism; the voltage reducer (53) has a voltage input, which is connected to both the energy conversion device (23) and the first electrical storage mechanism; the connection between the engine (1) and the electric motor/generator (3) is mechanically releasable; the assembly including a drive shaft, which is coupled to the engine; the drive shaft is selectively coupled to the engine (1); the drive shaft is also coupled to the electric motor; the electric motor/generator (3) and the energy conversion device (23) are the sole sources for charging power for the first

Art Unit: 3618

and second energy storage mechanisms on the hybrid vehicle assembly; the energy conversion device includes an alternator (23) (column 5, lines 2-8); the energy conversion device converts between electrical and mechanical energy; the first and second electrical storage mechanisms each comprises a battery; the electric motor (3) is operable as a generator when the engine (1) is propelling the vehicle to provide charging power to the first and second electrical storage mechanisms (see column 4, lines 34-46), the single generator/alternator (23) and the electric motor being the sole sources for charging power on the vehicle. Note, the system is capable of providing charging power to the second electrical storage mechanism at a lower voltage.

3. Claims 1, 4-14, 17-30 and 33-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Ellers (US Patent 4,923,025).

Ellers teaches a hybrid vehicle assembly including: an electric motor/generator (7), which is operable as a motor and as an electrical energy generator; an engine; a connection between the electric motor/generator and the engine (63); a first electrical storage mechanism (5) connected to the electric motor/generator (7) for selectively powering the electric motor/generator (7) (see column 2, lines 20-24); an energy conversion device (31) continuously connected to the engine (63); a second electrical storage mechanism (29) (see column 2, lines 64-67); and a voltage reducer (33) coupled to the first electrical storage mechanism (5), the energy conversion device (31) and the second electrical storage mechanism (29) so as to provide charge from the first electrical storage mechanism (5), the energy conversion device (31) and the electrical

Art Unit: 3618

energy generator to the second electrical storage mechanism (29) (see Figure 2); the voltage reducer (33) has a voltage input, which is connected to both the energy conversion device (31) and the first electrical storage mechanism (5) (clearly shown in Figure 2); the connection between the engine (63) and the electric motor/generator (7) is mechanically releasable via switch (47); the assembly including a drive shaft, which is coupled to the engine (63); the drive shaft is selectively coupled to the engine; the drive shaft is also coupled to the electric motor (7); the electric motor/generator (7) and the energy conversion device (31) are the sole sources for charging power for the first and second energy storage mechanisms (5, 29) on the hybrid vehicle assembly; the energy conversion device includes an alternator (31) (column 2, lines 64-67); the energy conversion device (31) converts between electrical and mechanical energy; the first and second electrical storage mechanisms each include a battery; the electric motor (7) is operable as a generator when the engine (63) is propelling the vehicle to provide charging power to the first and second electrical storage mechanisms (5, 29), the single generator/alternator (31) and the electric motor (7) being the sole sources for charging power on the vehicle. Note, the system is capable of providing charging power to the second electrical storage mechanism at a lower voltage.

Response to Arguments

4. Applicant's arguments filed June 6, 2005 have been fully considered but they are not persuasive. Contrary to applicant's arguments, Kawakatsu et al. (US Patent 4,407,132) teaches a voltage reducer/interface 53 that provides "a voltage which is

Art Unit: 3618

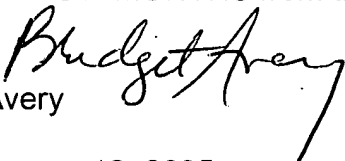
proportional to the voltage of battery 49..." as stated in column 6, lines 19-26.

Therefore, interface 53 is clearly capable of reducing voltage to provide a voltage that is "proportional to the voltage of battery 49." With respect to Ellers (US Patent 4,923,025), voltage regulator 33 is capable of reducing voltage as described in column 2, lines 64-68 and column 3, lines 1-4.

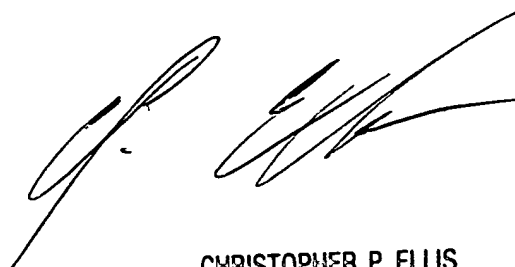
Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Avery

August 18, 2005



CHRISTOPHER P. ELLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600